APPLICATION PACKET
FOR A
CONCRETE BATCH PLANT
GENERAL PERMIT

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I. INTRODUCTION

This application has been developed specifically for applicants pursuing coverage under the Concrete Batch Plant General Permit in lieu of an individual permit. However, this application is not intended as a substitute for the Arizona Air Quality Regulations.

A. APPLICABILITY

1. The Concrete Batch Plant General Permit, hereafter referred to as the General Permit, covers "stand-alone" stationary and portable plants (those which are not located on contiguous or adjacent property with a supporting crushing and screening plant) that are subject to state and/or county regulations.

2. This General Permit applies to sources operating in all counties of Arizona including Maricopa County. Sources planning to operate in Maricopa County need to calculate the hourly limitations that will be imposed on the facility due to the non-attainment status of the area. Sources will be limited to NO_x emissions of 135 pounds per day and 22.5 tons per year or CO emissions of 495 pounds per day and 90 tons per year.

3. This General Permit applies only to the emission units listed in TABLE 1 below:

TABLE 1: EQUIPMENT AND ACTIVITIES COVERED UNDER THIS GENERAL PERMIT

Concrete Batch Plant*	Internal Combustion Engines****
Stand-Alone Silos**	Storage Piles
Baghouses***	Vehicular Traffic
Elevated Storage Bins	Wash Plant
Non-NSPS Boilers*****	

* Includes connected conveyor systems and feed hoppers, enclosed augers and silos, weigh hoppers, and mixers.
** Includes attached baghouse and pneumatic or bucket loading system.
*** Those not attached to a silo.
**** Each internal combustion engine shall be issued an individual ATO, except those which are integrated into conveyors.
***** Each boiler shall be issued an individual ATO. Total maxim,um capacity of all boilers at the facility is limited to 10 Million British Thermal Unit (MMBtu) / hr or less.

If operation of equipment not included in the above listing is necessary, than coverage under the General Permit cannot be granted. In this case, an application for an individual permit should be submitted.

4. To avoid exceeding the National Ambient Air Quality Standards (NAAQS) for particulate matter with mean diameter of less than 10 microns (PM_{10}) as established under A.A.C. R18-2-201, the Permittee will be required to limit the daily concrete production rate to:

   a. **1,060** cubic yards (yd^3) or less when operating under generator power; or

   b. **1,175** yd^3 or less when operating <u>exclusively</u> under commercial power.

   To avoid exceeding the NAAQS for nitrogen oxides (NO_X) as established under A.A.C. R18-2-205, the Permittee shall limit the total rated horsepower (hp) of all internal combustion engines to **735** hp or less. This does **not** include mobile equipment such as trucks and front-end loaders. The Permittee shall limit the total maximum capacity of all Non-NSPS boilers to **10** MMBtu / hr.

5. Sources planning to operate solely in Maricopa, Pima or Pinal Counties during the entire permit term need to obtain an individual or a general permit from the Maricopa County Air Quality Control District (AQCD), Pima County AQCD, or Pinal County AQCD.

B. AUTHORIZATIONS TO OPERATE

1. If the applicant meets the criteria for coverage under this General Permit, an Authorization To Operate (ATO) will be issued for each concrete batch plant equipment (which includes connected conveyor systems and feed hoppers, enclosed augers and silos, weigh hoppers, and mixers), stand-alone silo (which includes attached baghouse and pneumatic or bucket loading system), boilers, and internal combustion engine (except those which are integrated into conveyors).

2. If the applicant is a rental company, the applicant will apply for coverage under this General Permit by grouping together representative equipment that are typical of the plants that are rented out to the concrete batch plant industry. This grouping will be limited in size by the concrete production, boiler capacity limits and internal combustion engine horsepower limits described above. Depending upon the amount of rental equipment that is owned by the applicant, it is possible that the applicant may end up with multiple coverages under this General Permit.

C. JURISDICTION

Maricopa, Pima and Pinal County AQCDs may administer, inspect, and enforce this General Permit and issue ATOs for sources under their jurisdiction. The agency which issues the ATO has jurisdiction over these sources and is responsible for enforcing the conditions of this General Permit unless the Arizona Department of Environmental Quality (ADEQ) asserts jurisdiction over these sources.

1. Stationary Sources

   Stationary sources wishing to obtain coverage under this General Permit and associated ATOs will be required to apply to the ADEQ, except for stationary sources which are located in either Maricopa, Pima or Pinal County. These stationary sources will be required to obtain coverage under this General Permit from the respective AQCD.

2. Portable Sources

   a. A portable source is any stationary source which is capable of being transported and operated in more than one county of Arizona.

   b. According to A.R.S. §49-402, portable sources wishing to obtain coverage under this General Permit will be required to apply to the ADEQ. However, if the portable source will operate for the remaining term of this General Permit in either Maricopa, Pima or Pinal County, then the respective AQCD will process the application for coverage under this General Permit.

   c. Only under some unforeseen situation may a portable source which has received coverage under this General Permit from either the Maricopa, Pima or Pinal County AQCD be allowed to operate in any other county, unless one of the following occurs:

      (1) If a portable source is proposing to operate in a county without an AQCD, then the portable source will be required to apply to the ADEQ and obtain coverage under this General Permit before beginning operations in that county; or

      (2) If a portable source is proposing to operate for the remaining term of this General Permit in another county with an AQCD, then the portable source will be required to apply to the respective AQCD and obtain coverage under this General Permit before beginning operations in that county.

D. PERMIT ISSUANCE TIME FRAME

According to A.A.C. R18-1-525, ADEQ has 21 business days to determine if the submitted general permit application is complete. Once the application is determined to be complete, the Department has 103 business days to make a licensing decision on the application. The counting of the days can be suspended by the Department upon the determination that additional information is needed. In such a case, a letter will be sent to the applicant informing them that the counting of days has been suspended, and will also specify what additional information is necessary to continue processing the application.

II. APPLICATION INSTRUCTIONS

This section helps the applicant assemble a complete application, perform the appropriate calculations, complete a compliance plan/certification, and submit all information in a manner that will expedite the application review.

Please read all of the following sections very carefully and provide all information requested. The final application, which you will submit, should include all the forms in the application packet and any attachments necessary to submit all information (i.e. map, plot plan, etc.). Make additional copies of the forms as necessary to ensure all of the required information is included.

A. STEP 1: Standard Permit Application Form

A.A.C. R18-2-304 requires applicants to submit the Standard Permit Application Form and Filing Instructions. The first step to fulfilling the submittal requirements for coverage under the General Permit is properly completing FORM 1 "STANDARD PERMIT APPLICATION FORM". Items 1 through 5 of the application form are self-explanatory. The rest are explained below in detail:

1. Item #6 asks for the Plant/Site Manager or Contact Person. This should be the person the ADEQ may contact for additional information.

2. Item #7 is necessary to determine the location of the plant. The township/range/section may be substituted for the latitude/longitude coordinates (degrees, minutes and seconds).

3. Item #8, the "Equipment Name/Purpose and Equipment List/Description" should describe what is produced at the plant.

4. Under Item #9, if the "other" box is checked, please be specific as to the type of organization.

5. Item #10 asks for the Permit Application Basis that indicates what type of permit is necessary. The following steps should be utilized when filling out Item #10:

    a. If the equipment has never been permitted, then the boxes titled "New Source" and "General Permit" should be checked.

    b. If the equipment is already permitted under an individual permit and you are applying for coverage under the General Permit, then the boxes titled "Renewal of Existing Permit" and "General Permit" should be checked and the current permit number must be included on the line titled "For renewal or modification, include existing permit number".

    c. If you have a group of equipment covered by the General Permit and you are adding additional equipment, then the boxes titled "Revision" and "General Permit" should be checked and the current General Permit Number(s) must be included on the line titled "For renewal or modification, include existing permit number".

    d. If the equipment is portable, then the box titled "Portable Source" should be checked.

e. For new sources the "Date of Commencement of Construction or Modification" is the expected date that construction will begin. For existing sources this date need not be defined.

f. If there is any chance that the equipment will be leased out, answer "yes" in the appropriate box.

g. The "Standard Industrial Classification Code" for concrete batch plants is **3273**.

h. The "State Permit Class" for concrete batch plants utilizing this application packet is "**Class II General**".

6. The "Responsible Official" referred to in Item #11 is the owner or a partner of the company in most cases. It may also be the president or vice-president of larger companies. If there is a question as to who the responsible official is, contact ADEQ for more information.

B. STEP 2: Determination of Coverage Eligibility

Coverage eligibility to operate under the general permit must be determined. FORM 2 is used for this determination - please complete sections A through F of that form as accurately as possible.

C. STEP 3: Equipment List

1. ADEQ needs to be able to identify all pieces of equipment covered under the General Permit. Use FORM 3 to provide a list of all equipment to be permitted including control equipment and internal combustion engines (this does not include internal combustion engines associated with motor driven vehicles). **The list should include not only the type of equipment, but also the make, model, maximum rated capacity, serial number, manufacture date, and equipment identification number (if available) of each piece of equipment.** Please make additional copies if necessary.

2. In many cases, the equipment will not yet have been purchased at the time of application. If this is the case, the serial number does not need to be listed, but an equipment identification number will need to be provided. The equipment identification number must be clearly stenciled on each piece of equipment that is to be permitted before such equipment is installed.

D. STEP 4: Air Pollution Controls

All pollution control equipment and pollution control procedures must be described in order to satisfy this submittal requirement. FORM 4 can be used to submit the necessary pollution control information.

E. STEP 5: Emission Calculations

Air pollutant emission rate information must be provided by filling in all the Tables in Sections I, II of Form 5 in the application. These tables in Form 5 provide worksheets to assist the applicant in calculating emission rates from the various processes associated with the generators and co-located boiler operations (if applicable). Total emissions from each section must be transferred to TABLE 5 in Section III of Form 5 to estimate **Facility-wide Emissions** in pounds per hour.

Form 6 in the Application should be used to calculate the synthetic minor annual operating hours limitation for all location except Maricopa County.

Form 7 in the Application should be used to calculate the synthetic minor daily and annual operating hours limitation for Maricopa County.

F. STEP 6: Operation and Maintenance Plan

An operation and maintenance plan must be submitted by all applicants. FORM 8 can be used to submit a complete operation and maintenance plan.

G. STEP 7: Compliance Plan/Certification

A compliance plan/certification must be submitted by all applicants. FORM 9 can be used to submit a complete compliance certification.

H. STEP 8: Map of Facility Location

Please provide a map of the current facility location, depicting the perimeter and point of entry. This may be a city map, topographical map or any map that clearly shows the location. Mark the location of the facility on the map and submit it as part of the application. The map should include driving directions to the facility site from the nearest highway.

I. STEP 9: Plot Plan

Please provide a plot plan of the current equipment configuration. A plot plan is an aerial drawing of the plant property drawn to scale or with the dimensions shown. It should include:

1. A schematic of the typical equipment layout;
2. Location of any fuel tanks, control equipment and other equipment;
3. A scale, if the drawing is to scale; and
4. Photographs of the equipment, if available.

J. STEP 10: Process Description

Please provide a process description or process flow diagram. A process description is a brief description of the product manufacturing process. For an industrial or manufacturing process, this includes a description of how feed stocks, intermediate and final products are received, processed, stored and/or mixed, as well as how the final products are handled.

K. STEP 11: Dust Control Plan

If the initial location of the facility is in Maricopa County, the facility must submit a Dust Control Plan as described under Maricopa County Rule 310. The applicant may use the form available at http://www.maricopa.gov/aq/permits/docs/Empermit.pdf. This form must be filled in and submitted to ADEQ along with the application.

L. STEP 12: Filing Instructions

1. An Application Fee of $500 must be submitted by all applicants. Please make your check or money order payable to ADEQ. The Application Fee must accompany each application submittal.

2. Please mail the completed application and the $500 Application Fee to the following address:

Arizona Department of Environmental Quality
Air Quality Division
1110 West Washington
Phoenix, Arizona 85007

3. Please remember to make photo copies of FORMS 1 through 9 of the application packet before mailing for your records.

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FORM 1: ARIZONA DEPARTMENT OF ENVIRONMENTAL QUALITY
Air Quality Division
1110 West Washington ♦ Phoenix, AZ 85007 ♦ Phone: (602) 771-2338

STANDARD PERMIT APPLICATION FORM

(As required by A.R.S. § 49-426, and Chapter 2, Article 3, Arizona Administrative Code)

1. Permit to be issued to: (Business license name of organization that is to receive permit) _____

_____

2. Mailing Address: _____

City: _____ State: _____ ZIP: _____

3. Previous Company Name: (if applicable) _____

4. Name (or names) of Owners/Principals: _____

FAX #: _____ Phone: _____

5. Name of Owner's Agent: _____

FAX #: _____ Phone: _____

6. Plant/Site Manager/Contact Person and Title: _____

FAX #: _____ Phone: _____

7. Plant Site Name: _____

Plant Site Location/Address: _____

City: _____ County: _____ ZIP: _____

Indian Reservation (if applicable, which one): _____

Latitude/Longitude, Elevation: _____

8. Equipment Purpose: _____

Equipment List/Description: _____

_____

_____

_____

9. Type of Organization:

☐ Corporation ☐ Individual Owner

☐ Partnership ☐ Government Entity (Government Facility Code: _____)

☐ Other _____

10. Permit Application Basis: ☐ New Source ☐ Revision ☐ Renewal of Existing Permit

(Check all that apply.) ☐ Portable Source ☒ General Permit

For renewal or modification, include existing permit number (and exp. date): _____

Date of Commencement of Construction or Modification: _____

Is **any** of the equipment to be leased to another individual or entity? ☐ Yes ☐ No

Standard Industrial Classification Code: **3273** State Permit Class: **Class II General**

11. Signature of Responsible Official of Organization: _____

Official Title of Signer: _____

12. Typed or Printed Name of Signer: _____

Date: _____ Telephone Number: _____

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FORM 2: DETERMINATION OF COVERAGE ELIGIBILITY

This section guides the applicant through a series of questions to determine coverage eligibility. If the applicant fails any of the eligibility criteria, then this general permit application cannot be used and an individual permit application package must be completed.

A. Does the facility co-locate a Crushing/Screening Plant with the Concrete Batch Plant? Yes ☐ No ☐

If Yes, you do not qualify for coverage under the Concrete Batch Plant General Permit. Please contact the Air Quality Permits Section.
If No, proceed to Question B.

B. Will you operate exclusively in Maricopa County through the permit term? Yes ☐ No ☐

If Yes, you do not qualify for coverage under the Concrete Batch Plant General Permit. Please contact the Maricopa County Air Quality Department.
If No, proceed to Question C.

C. Will you operate exclusively in Pima County through the permit term? Yes ☐ No ☐

If Yes, you do not qualify for coverage under the Concrete Batch Plant General Permit. Please contact the Pima County Department of Environmental Quality.
If No, proceed to Question D.

D. Will you operate exclusively in Pinal County through the permit term? Yes ☐ No ☐

If Yes, you do not qualify for coverage under the Concrete Batch Plant General Permit. Please contact the Pinal County Air Quality Department.
If No, proceed to Question E.

E. Will you operate in Maricopa / Pima / Pinal Counties and rest of counties in Arizona through the permit term? Yes ☐ No ☐

If Yes, proceed to Question F.
If No, please contact the Air Quality Permits Section.

F. Is the total horsepower rating of all generators used at the facility (excluding engines approved as non-road engines by ADEQ) greater than 735 horsepower? Yes ☐ No ☐

If Yes, you do not qualify for coverage under the ADEQ Concrete Batch Plant General Permit and must complete an individual permit application package.
If No, proceed to Question G.

G. Is the maximum capacity of all boilers used at the facility greater than or equal to 10 MMBtu/hr? Yes ☐ No ☐

If Yes, you do not qualify for coverage under the Concrete Batch Plant General Permit. Please complete an individual permit application package.
If No, proceed to Question H.

H. What is your maximum daily production rate? _____ Cubic yards / day

If covered by this General Permit the maximum daily production rate will be limited to 1,060 cubic yards/day (with generator power) or 1,175 cubic yards/day (without generator power).

I. If your answer to "**H**" is greater than 1,060 cubic yards/day and you operate to any extent under generator power, or 1,175 cubic yards/day and you operate exclusively under commercial power, are you willing to limit your operations to the capacities mentioned above? Yes ☐ No ☐

If Yes, proceed to question J.
If No, you do not qualify for coverage under the Concrete Batch Plant General Permit. Please complete an individual permit application package.

J. Do the internal combustion engine(s) burn any fuels other than diesel, natural gas, LPG or gasoline? Yes ☐ No ☐

If Yes, you do not qualify for coverage under the Concrete Batch Plant General Permit. Please complete an individual permit application package.
If No, proceed to question K.

K. Do the boiler(s) burn any fuels other than diesel, natural gas or LPG (Butane / Propane)? Yes ☐ No ☐

If Yes, you do not qualify for coverage under the Concrete Batch Plant General Permit. Please complete an individual permit application package.
If No, proceed to question L.

L. Does the facility burn fuel with sulfur content less than 0.9 percent? Yes ☐ No ☐

If Yes, proceed to question M.
If No, you do not qualify for coverage under the Concrete Batch Plant General Permit. Please complete an individual permit application package.

M. Will you operate in Maricopa County? Yes ☐ No ☐

If Yes, proceed to question N.
If No, proceed to O.

N. Will the facility be able to limit its operating hours to the number of daily and annual hours calculated in Form 7 while operating in Maricopa County? Yes ☐ No ☐

If Yes, proceed to question O.
If No, you do not qualify for coverage under the Concrete Batch Plant General Permit. Please complete an individual permit application package.

O. Will the facility be able to limit its operating hours to the number of hours calculated in Form 6 while operating at any location except in Maricopa County? Yes ☐ No ☐

If Yes, proceed to question P.
If No, you do not qualify for coverage under the Concrete Batch Plant General Permit. Please complete an individual permit application package.

P. Table 2.A must be completed in order to calculate the total horsepower capacity of internal combustion engines that operate at the plant. Include **ALL** stationary internal combustion engines that will be operating at the plant, including both generator sets and equipment engines. Do not include mobile sources such as front-end loaders.

* Internal combustion engines determined by the Department to meet the definition of "non road engine" in 40 CFR 89.2 are exempt from the above determination and also exempt from any requirements in the General Permit.

Table 2.A INTERNAL COMBUSTION ENGINE HORSEPOWER RATINGS (*)

Manufacturer/ Model Number	Serial # or Equipment ID #	Maximum Brake Horsepower Rating (hp)
	TOTAL HP:	

If the Total Horsepower Rating from Table 2.A exceeds 735 hp, you do not qualify for coverage under the Concrete Batch Plant General Permit. Please complete an individual permit application package.

Q. Table 2.B must be completed in order for ADEQ to monitor miscellaneous source information specific to the applicant's batch plant operation.

Table 2.B MISCELLANEOUS SOURCE INFORMATION

Number of Vehicle Miles Traveled by Front-End Loaders per Hour (VMT/hr):	
Number of Vehicle Miles Traveled by Ready-Mix Trucks per Hour (VMT/hr):	
Number of Storage Piles at the Plant:	
Number of Fly Ash Silos at the Plant:	
Number of Cement Silos at the Plant:	

ADEQ USE ONLY	
Engineer's Initials	
Date	

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FORM 3: EQUIPMENT LIST

ADEQ needs to be able to identify all pieces of equipment covered under the General Permit. Complete Form 3 to provide a list of all pieces of equipment to be permitted including control equipment and internal combustion engines. Please make additional copies if necessary.

Type of Equipment	Maximum Rated Capacity	Make	Model	Serial Number	Date of Manufacture	Equipment I.D. Number

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FORM 4: AIR POLLUTION CONTROLS

In order for ADEQ to fully evaluate a General Permit application, the type of air pollution controls utilized must be submitted. This section of the application is intended to assist the applicant in listing the air pollution controls that are utilized at the plant. TABLE 3 must be completed by check marking each emission point(s) with the appropriate air pollution control device. Generally emissions are controlled with spray bars, sprinkler systems and a water truck. In addition, some operators choose to use a chemical surfactant or dust palliative. Shaded boxes represent air pollution control devices which are typically not utilized with the referenced emission point(s).

TABLE 3: AIR POLLUTION CONTROLS CHECKLIST

AIR POLLUTION CONTROL DEVICE	EMISSION POINT								
	Material Handling (Front End Loaders)	Feed Hoppers	Elevated Bins/ Weigh Hoppers	Cement / Fly Ash Silo	Mixer Loading (Truck Mix)	Mixer Loading (Central Mix)	Transfer Points	Haul Roads	Storage Piles
Spray Bars									
Sprinklers									
Water Truck									
Water Hose									
Baghouse									
Other:									
Other:									

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FORM 5: EMISSION CALCULATIONS

I. INTERNAL COMBUSTION ENGINE(S)

This form must be completed in order to calculate the emissions from the internal combustion engine(s) (ICE), when they are burning diesel fuel, natural gas / LPG or Gasoline.

TABLE 5 must be used if the facility uses **ADEQ emission factors** for any of the ICE(s). Emissions, in pounds per hour, from the ICE(s) are calculated by multiplying total rated HP of each type of ICE as listed in (a), (b), (c) and (d) by the corresponding emission factor for each pollutant in column (e), (f), (g) and (h). The applicant may choose to use **emission factors provided by the manufacturer or test results** for any / all of its ICE(s) by using **TABLE 6**. In such an event, supporting documents (manufacturers' data sheet / test results etc.) indicating these factors must be submitted along with the application. Also, the Permittee will be subject to annual testing requirements, as outlined in the General Permit.

TABLE 5

Total HP of all diesel ICE(s) with individual HP of less than 600 HP: _____ HP (a)
Total HP of all diesel ICE(s) with individual HP of greater than 600 HP: _____ HP (b)
Total HP of all natural gas / LPG fired ICE(s): _____ HP (c)
Total HP of all gasoline fired ICE(s): _____ HP (d)

Pollutant	Emission Factor				Emissions				Total Emissions from all ICE(s)
	Diesel Engines (Smaller than 600 HP)	Diesel Engines (larger than 600 HP)	Natural gas/ LPG-fired Engines	Gasoline	Diesel Engines (Smaller than 600 HP)	Diesel Engines (larger than 600 HP)	Natural gas/ LPG-fired Engines	Gasoline Engines	
	Pounds per hp-hr				Pounds per hour				Pounds per hour
	e	f	g	h	A = a x e	B = b x f	C = c x g	D = d x h	E1 = A + B + C + D
PM	2.20E-03	7.00E-04	6.94E-05	7.21E-04					
PM_{10}	2.20E-03	7.00E-04	5.40E-07	7.21E-04					
CO	6.68E-03	5.50E-03	2.22E-03	4.39E-01					
NO_x	3.10E-02	2.40E-02	2.86E-02	1.10E-02					
SO_2	2.05E-03	6.47E-03	4.12E-06	5.91E-04					
VOCs	2.47E-03	7.05E-04	8.26E-04	2.16E-02					

TABLE 6

If the facility wishes to use **manufacturer's data or test results** in place of ADEQ emission factors for any / all of its ICE(s), this table must be completed to calculate emissions from those ICE(s). In such an event, supporting documents (manufacturers' data sheet / test results etc.) documenting these factors must be submitted along with the application. Also, the Permittee will be subject to annual testing requirements, as outlined in the General Permit. Emission factor for each ICE must be filled in columns e to f and multiplied by rated horsepower for corresponding ICE (a) through (d).

ICE 1: _____ HP (a) Fuel used: _____
ICE 2: _____ HP (b) Fuel used: _____
ICE 3: _____ HP (c) Fuel used: _____
ICE 4: _____ HP (d) Fuel used: _____

Pollutant	Emission Factor				Emissions				Total Emissions from all ICE(s)
	ICE 1	ICE 2	ICE 3	ICE 4	ICE 1	ICE 2	ICE 3	ICE 4	
	Pounds per hp-hr				Pounds per hour				Pounds per hour
	e	f	g	h	A = a x e	B = b x f	C = c x g	D = d x h	E2 = A + B + C + D
PM									
PM_{10}									
CO									
NO_x									
SO_2									
VOCs									

TABLE 7: Total Emissions from all ICE(s)

Pollutant	Total Emissions from TABLE 5 (E1)	Total Emissions from TABLE 6 (E2)	Emissions from all ICE(s) (E1 + E2)
	Pounds per hour	Pounds per hour	Pounds per hour
PM			
PM_{10}			
CO			
NO_x			
SO_2			
VOCs			

Emissions from TABLE 7 must be transferred to Total Emissions TABLES 11-A and 11-B.

II. BOILER(S)

This form must be completed in order to calculate the emissions from the boiler(s), when they are burning diesel fuel, natural gas, or LPG (Butane / Propane).

TABLE 8 must be used if the facility uses **ADEQ emission factors** for any of the boiler(s). Emissions, in pounds per hour, from the boiler(s) are calculated by multiplying total rated MMBtu/hr of each type of boiler as listed in (a), (b) and (c) by the corresponding emission factor for each pollutant in column (d), (e) and (f).

TABLE 8

Total MMBtu/hr of all diesel boiler(s): _____ MMBtu/hr (a)
Total MMBtu/hr of all natural gas boiler(s): _____ MMBtu/hr (b)
Total MMBtu/hr of all LPG (propane / butane) boiler(s): _____ MMBtu/hr (c)

Pollutant	Emission Factor			Emissions			Total Emissions from all boiler(s)
	Diesel	Natural Gas	LPG (Butane / Propane)	Diesel	Natural Gas	LPG (Butane / Propane)	
	Pounds per MMBtu			Pounds per hour			Pounds per hour
	d	e	f	A = a x d	B = b x e	C = c x f	E1 = A + B + C
PM	2.40E-02	7.24E-03	6.40E-03				
PM_{10}	2.40E-02	7.24E-03	6.40E-03				
CO	3.65E-02	8.00E-02	3.62E-02				
NO_x	1.46E-01	9.52E-02	2.13E-01				
SO_2	8.29E-01	5.71E-04	0.00E+00				
VOCs	2.50E-03	5.24E-03	7.41E-03				

TABLE 9

If the facility wishes to use **manufacturer's data or test results** in place of ADEQ emission factors for any / all of the boiler(s), this table must be completed to calculate emissions from those boiler(s). In such an event, supporting documents (manufacturers' data sheet / test results etc.) documenting these factors must be submitted along with the application. Also, the Permittee will be subject to annual testing requirements, as outlined in the General Permit. Emission factor for each boiler must be filled in columns d to f and multiplied by rated MMBtu/hr for corresponding boiler (a) through (c).

Boiler 1: _____ MMBtu/hr (a) Fuel used: _____
Boiler 2: _____ MMBtu/hr (b) Fuel used: _____
Boiler 3: _____ MMBtu/hr (c) Fuel used: _____

Pollutant	Emission Factor			Emissions			Total Emissions from all boiler(s)
	Boiler 1	Boiler 2	Boiler 3	Boiler 1	Boiler 2	Boiler 3	
	Pounds per MMBtu			Pounds per hour			Pounds per hour
	d	e	f	A = a x d	B = b x e	C = c x f	E2 = A + B + C
PM							
PM_{10}							
CO							
NO_x							
SO_2							
VOCs							

TABLE 10: Total Emissions from all Boilers(s)

Pollutant	Total Emissions from TABLE 8 (E1)	Total Emissions from TABLE 9 (E2)	Emissions from all Boiler(s) (E1 + E2)
	Pounds per hour	Pounds per hour	Pounds per hour
PM			
PM_{10}			
CO			
NO_x			
SO_2			
VOCs			

Emissions from TABLE 10 must be transferred to Total Emissions TABLES 11-A and 11-B.

III. FACILITY WIDE EMISSIONS

TABLE 11-A and 11-B are for calculating Facility Wide Emissions and must be filled in with the calculated emissions from **TABLES 7** and **10**. These facility wide emissions are used in **TABLES 12 and 13** to determine operating hours.

TABLE 11-A: Concrete Batch Plant Emissions without Generator

Pollutant	PM/PM_{10} Emissions from Concrete Batch Plant	Emissions from Boiler(s)	**Facility wide Emissions**
		TABLE 10	**Concrete Batch Plant + Boiler(s)**
	Pounds per hour		
PM	3.92		
PM_{10}	1.96		
CO			
NO_x			
SO_2			
VOCs			

TABLE 11-B: Concrete Batch Plant Emissions with Generator

Pollutant	PM/PM_{10} Emissions from Concrete Batch Plant	Emissions from ICE(s)	Emissions from Boiler(s)	**Facility wide Emissions**
		TABLE 7	TABLE 10	**Concrete Batch Plant + ICE(s) + Boiler(s)**
	Pounds per hour			
PM	3.53			
PM_{10}	1.77			
CO				
NO_x				
SO_2				
VOCs				

FORM 6: STATE WIDE SYNTHETIC MINOR CALCULATION (EXCEPT MARICOPA COUNTY)

This table is to be used for calculating synthetic minor limitations for the facility that will be operating statewide except Maricopa County. Facility-wide Emissions from **TABLE 11-A or 11-B** must be transferred to column (a) of **TABLE 12** and utilized to calculate annual emissions and annual operating hours.

TABLE 12

Pollutant	Facility Wide Emissions From TABLE 11-A or 11-B	Annual Emissions	Emission Limit	Annual operation hours
	Pounds per hour	Tons per year	Tons per year	Hours
	a	b = a x 4.38	c	d = c/b x 8760
PM			90	
PM_{10}			90	
CO			90	
NO_x			90	
SO_2			90	
VOCs			90	

The **lowest number** in column d is the synthetic minor limitation for operating hours for the Facility.

FORM 7: SYNTHETIC MINOR CALCULATION FOR MARICOPA COUNTY

This table is to be used for calculating synthetic minor limitations for the facility that will be operating in Maricopa County. Facility-wide Emissions from column (a) of **TABLE 12** must be transferred to column (a) of **TABLE 13** and utilized to calculate daily & annual emissions and daily & annual operating hours.

TABLE 13

Pollutant	Facility Wide Emissions			Emission Limit for Maricopa County		Limitation on Operating Hours in Maricopa County	
	Lb/hr	Lb/day	Tons/year	Lb/day	Tons/yr	Hours/day	Hours/year
	a	b = a x 24	c = a x 4.38	d	e	F = d/b x 24	G = e/c x 8760
PM				135	22.5		
PM_{10}				76.5	13.5		
CO				495	90		
NO_x				135	22.5		
SO_2				135	22.5		
VOCs				135	22.5		

The **lowest numbers** in Columns F and G are the Limitation on Daily and Annual Operating Hours for Maricopa County.

FORM 8: OPERATION AND MAINTENANCE PLAN

In order for the applicant to be granted coverage under the Concrete Batch Plant General Permit, the applicant must submit and agree to operate in accordance with an acceptable Operation and Maintenance (O&M) plan which identifies the procedures utilized to maintain its air pollution controls. This section of the application is intended to assist the applicant in the development of their O&M plan. Mark the appropriate boxes that best describe the startup and shutdown procedures, operations plan, and maintenance plan for your batch plant operation. If the given descriptions do not describe your operation or have left something out, please fill in the box marked other with this information. The applicant should make additional copies of any pages necessary in order to submit a complete O&M plan.

1. STARTUP AND SHUTDOWN PROCEDURES

a. Water Truck

i. Startup

☐ Check water supply, inspect nozzles and open all associated valves before startup.

☐ Other: _____

☐ Not Applicable

ii. Shutdown

☐ Inspect nozzles and close all associated valves after shutdown.

☐ Other: _____

☐ Not Applicable

b. Processing Plant Water Spray Dust Suppression

i. Startup

☐ Check water supply, inspect nozzles and open all associated valves before startup.

☐ Other: _____

☐ Not Applicable

FORM 8: OPERATION AND MAINTENANCE PLAN, CONTINUED

1. STARTUP AND SHUTDOWN PROCEDURES, CONTINUED

Shutdown

☐ Inspect nozzles and close all associated valves after shutdown.

☐ Other: _____

☐ Not Applicable

a. Baghouse

i. Startup

☐ Visual inspection of: product lines, vent lines and all fittings, including dust shroud and baghouse blower.

☐ Other: _____

☐ Not Applicable

ii. Shutdown

☐ Check that all pressurized systems are off.

☐ Other: _____

☐ Not Applicable

b. Other Control Device:

i. Startup

☐ _____

ii. Shutdown

☐ _____

FORM 8: OPERATION AND MAINTENANCE PLAN, CONTINUED

2. OPERATIONS PLAN

a. Water Truck Operation

☐ Water truck to be operated simultaneous with pit and/or yard loading operations. These activities include earth moving, unpaved haul roads, storage piles and inactive disturbed areas. Water spray application rate will be determined based on the occurrence of visible dust and may vary depending on existing road conditions, traffic, wind, temperature, and precipitation.

☐ Other: _____

_____

_____

☐ Not Applicable

b. Processing Plant Water Spray Dust Suppression Operation

☐ The water sprays will be utilized to control dust during material processing whenever the material is not adequately wet to prevent visible emissions from occurring in excess of the applicable opacity limits listed in the Concrete Batch Plant General Permit. Sprays will be located at designated transfer points and will be operated as needed to meet the applicable opacity limits listed in the Concrete Batch Plant General Permit. Visual opacity observations will be made regularly to verify proper functioning of equipment.

☐ Other: _____

_____

_____

☐ Not Applicable

c. Baghouse Operation

☐ The baghouse will be operated at all times when pertinent equipment is operating. The following parameters shall be monitored and recorded once daily during operation:

(1) Pressure drop between exhaust and inflow shall be maintained between _____ and _____ inches of water;

(2) Damper setting shall be between _____ and _____ percent; and

(3) Stack exhaust temperature shall be below _____.

Visual opacity observations will be made regularly to verify proper functioning of equipment. When emissions are suspected to approach compliance values, equipment will be checked for problems.

☐ Other: _____

_____

_____

☐ Not Applicable

d. Wash Plant Operation

☐ Spray bars will be used in such a manner that the material in the wash plant will remain sufficiently wet so as not to cause visible emissions.

☐ Other: _____

☐ Not Applicable

e. Other Control Device Operation:

☐ _____

3. MAINTENANCE PLAN

a. Water Truck Maintenance

☐ A safety check and equipment check will be conducted daily. Normal vehicle maintenance will be performed regularly or as needed.

☐ Other: _____

☐ Not Applicable

b. Processing Plant Water Spray Dust Suppression Maintenance

☐ The spray system will be checked daily for performance. Nozzles and valves will be cleaned or replaced as needed.

☐ Other: _____

☐ Not Applicable

c. Baghouse Maintenance

☐ Baghouse pressure and temperature gauges, flow meters, and other associated instruments will be checked daily for proper functioning. Abnormal readings will normally detect equipment failures or leaks. Any detected equipment failures will be remedied as soon as possible. Baghouse ducts, hoods, framework, and housing will be checked daily for signs of wear from corrosion, erosion, excessive heat, and excessive moisture when operating. Fan motor, and bearings, shaking device, reverse jet blow rings, valves, and dampers will be lubricated regularly and checked for wear.

☐ Other: _____

☐ Not Applicable

d. Other Control Device:

☐ _____

FORM 9: COMPLIANCE CERTIFICATION AND CERTIFICATION OF TRUTH, ACCURACY, AND COMPLETENESS

This certification must be signed by the Responsible Official. Applications without a signed certification will be deemed incomplete.

I certify that I have knowledge of the facts herein set forth, that the same are true, accurate and complete to the best of my knowledge and belief, and that all information not identified by me as confidential in nature shall be treated by ADEQ as public record. I also attest that I am in compliance with the applicable requirements of the General Permit and will continue to comply with such requirements and any future requirements that become effective during the life of the General Permit. I will present a certification of compliance to ADEQ no less than semiannually and more frequently if specified by ADEQ. I further state that I will assume responsibility for the construction, modification, or operation of the source in accordance with Arizona Administrative Code, Title 18, Chapter 2 and any permit issued thereof.

Typed or Printed Company Name: _____

Official Title of Signer: _____

Typed or Printed Name of Signer: _____

Signature of Responsible Official: _____ Date: _____

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FORM 10: FEE RULE SUMMARY FOR GENERAL PERMITS

SOURCE

GENERAL PERMIT

CLASS II

TITLE V

APPLICATION FEE $500	**ANNUAL ADMINISTRATIVE FEE**	
	Small Source:	$750
	All Other Sources:	$4,520

NON - TITLE V

APPLICATION FEE $500	**ANNUAL INSPECTION FEE**	
	Crematories:	$1,500
	All Other Sources:	$3,020

There is a $500 fee for facility changes that require the issuance of new Authorizations to Operate.
There is no fee for transfers, administrative amendments, or facility change notices that do not require a permit revision.
Administrative and Inspection fees are due no later than February 1st of each year.